

# caTissue Suite



## Biobanking management system

caTissue Suite is an integrated set of caBIG® biorepository management tools designed for biospecimen inventory, tracking, and annotation. The core functions of caTissue Suite help users track the collection, storage, quality assurance, and distribution of biospecimens, as well as locate and request specimens for translational research studies. The suite may also be used to record clinical annotations on participants from whom biospecimens are collected and includes an optional module for extracting information from surgical pathology reports (Cancer Text Information Extraction System, or caTIES).

### Capabilities

- Utilize a Web-based application for easy data entry and search functionality
- Achieve controlled access to different data types and functions through role-based permission schemes
- Collect multiple specimen types and collection time points for a single participant
- Create flexible storage container schemes and manage biospecimen inventory
- Generate customized barcodes and labels
- Track quality assurance, processing, derivation, and distribution data for primary biospecimens and derived materials
- Create annotations for biospecimens and study participants, including informed consent status, clinical data, and pathology data
- Create dynamic extensions to collect user-defined data related to participants, specimens, and protocols
- Achieve programmatic access and integration with other systems through full-featured APIs
- Access multiple repositories in a single system with user-specific and protocol-specific controlled access to data, and ship and track biospecimens between repositories
- Create and save complex queries, including temporal-based queries
- Extract structured data from surgical pathology reports
- Achieve access to secure, aggregated data through a Common Query Language interface within caGrid

### Categories of Use

- |  |  |                                      |   |
|--|--|--------------------------------------|---|
| <input checked="" type="checkbox"/> <b>Biospecimens</b>    | <input type="checkbox"/> Data Sharing      | <input type="checkbox"/> Imaging     | <input type="checkbox"/> Proteomics             |
| <input type="checkbox"/> Clinical Trials Management        | <input type="checkbox"/> Genome Annotation | <input type="checkbox"/> Microarrays | <input type="checkbox"/> Translational Research |
| <input type="checkbox"/> Data Analysis & Statistical Tools | <input type="checkbox"/> Infrastructure    | <input type="checkbox"/> Pathways    | <input type="checkbox"/> Vocabularies           |



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caTissue Suite interface

### Architecture Overview

- **Application Type:** caTissue Suite is a Web-based, database driven J2EE application.
- **Server Requirements:** The application is certified for use under Windows 2000 series/XP, Mac OS 10.4.6, Linux Red Hat 9, or Red Hat enterprise ES/AS 2.1 or higher. Full installation requires JBoss version 4.2.2GA, MySQL version 5.0.45, or Oracle version 9i or 10g, JDK version 1.5, Ant version 1.7.
- **Client Requirements:** The supported browsers are IE 6/7, Firefox 2.0, or Safari 3.1.

### Installation and Administration

- **Skill set needed:** Linux/Windows server administrator, MySQL/Oracle database administrator, software engineer with experience with Java needed for application customization.
- **Infrastructure needed:** Windows/RedHat Enterprise Linux-based server (32- or 64- bit).
- **Long-term administration needs:** Ongoing system and database administration requirements such as disk space and database management, as well as routine system monitoring.

### Resources

Tool Overview Page	<a href="https://cabig.nci.nih.gov/tools/catissuesuite">https://cabig.nci.nih.gov/tools/catissuesuite</a>
Primary Workspace	Tissue Banks and Pathology Tools (TBPT) <a href="https://cabig.nci.nih.gov/workspaces/TBPT">https://cabig.nci.nih.gov/workspaces/TBPT</a>
Tissue/Biospecimen Banking and Technology Tools Knowledge Center	<a href="https://cabig-kc.nci.nih.gov/Biospecimen/KC">https://cabig-kc.nci.nih.gov/Biospecimen/KC</a>
Tissue Banks and Pathology Tools LISTSERV	<a href="https://list.nih.gov/archives/cabig_tbpt-l.html">https://list.nih.gov/archives/cabig_tbpt-l.html</a>
caBIG® Tool Inventory	<a href="https://cabig.nci.nih.gov/inventory">https://cabig.nci.nih.gov/inventory</a>
caBIG® Support Service Providers	<a href="https://cabig.nci.nih.gov/esn/service_providers">https://cabig.nci.nih.gov/esn/service_providers</a>
NCI Center for Bioinformatics Applications Support	<a href="mailto:ncicb@pop.nci.nih.gov">ncicb@pop.nci.nih.gov</a>

### Key Contributors

- Alvin J. Siteman Cancer Center at Washington University School of Medicine in St. Louis
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### Other Life Sciences Distribution Components

- caArray
- caBench-to-Bedside (caB2B)
- caIntegrator2
- Cancer Genome-Wide Association Studies (caGWAS)
- Clinical Trials Object Data System (CTODS)
- geWorkbench
- National Biomedical Imaging Archive (NBIA)



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